


Naval Safety



save lives | preserve resources | improve readiness

***RADM Dick Brooks, USN
Commander, Naval Safety Center***

Safety Brief Presented To  ***BOEING***



Magnitude of Accidents

In FY02, Navy and Marine Corps Mishaps Resulted In:

NAVY

- **1 Navy death every 79 hours**
- **1 POV death every 123 hours**
- **1 Aviation death every 71 days**
- **1 Active duty military injury every 6 hours**
- **1.8 Military members hospitalized every day**
- **11.33 Civilian man-years lost**
- **1 Aircraft destroyed every 45 days**
- **\$1.24 Million a day in aviation losses**

MARINE CORPS

- **1 Marine death every 86 hours**
- **1 POV death every 185 hours**
- **1 Aviation death every 25 days**
- **1 Active duty military injury every 25 hours**
- **1.9 Military members hospitalized every day**
- **2.53 Civilian man-years lost**
- **1 Aircraft destroyed every 23 days**
- **\$1.79 Million a day in aviation losses**



Secretary Rumsfeld's Challenge



THE SECRETARY OF DEFENSE
1000 DEFENSE PENTAGON
WASHINGTON, DC 20301-1000

May 19, 2003

MEMORANDUM FOR SECRETARIES OF THE MILITARY DEPARTMENTS
CHAIRMAN OF THE JOINT CHIEFS OF STAFF
UNDER SECRETARIES OF DEFENSE
DIRECTOR, DEFENSE RESEARCH AND ENGINEERING
ASSISTANT SECRETARIES OF DEFENSE
GENERAL COUNSEL OF THE DEPARTMENT OF
DEFENSE
INSPECTOR GENERAL OF THE DEPARTMENT OF
DEFENSE
DIRECTOR, OPERATIONAL TEST AND EVALUATION
ASSISTANTS TO THE SECRETARY OF DEFENSE
DIRECTOR, ADMINISTRATION AND MANAGEMENT
DIRECTOR, FORCE TRANSFORMATION
DIRECTOR, NET ASSESSMENT
DIRECTOR, PROGRAM ANALYSIS AND EVALUATION
DIRECTORS OF THE DEFENSE AGENCIES
DIRECTORS OF THE DOD FIELD ACTIVITIES

SUBJECT: Reducing Preventable Accidents

World-class organizations do not tolerate preventable accidents. Our accident rates have increased recently, and we need to turn this situation around. I challenge all of you to reduce the number of mishaps and accident rates by at least 50% in the next two years. ~~These goals are achievable, and will directly increase our operational readiness. We owe no less to the men and women who defend our Nation.~~

I have asked the Under Secretary of Defense for Personnel and Readiness to lead a department-wide effort to focus our accident reduction effort. I intend to be updated on our progress routinely. The USD(P&R) will provide detailed instructions in separate correspondence.



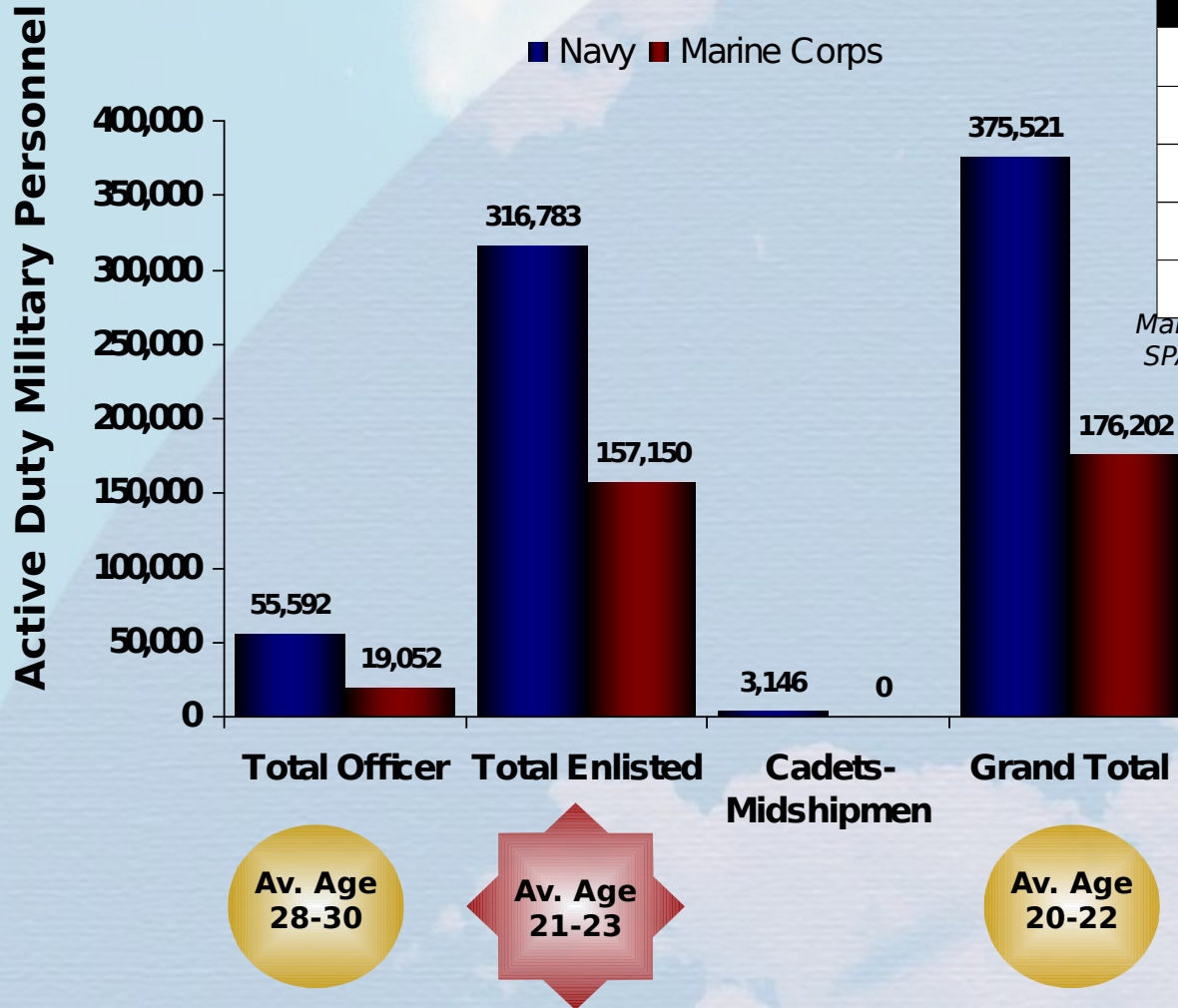
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“World-class organizations do not tolerate preventable accidents. Our accident rates have increased recently, and we need to turn this situation around. I challenge all of you to reduce the number of mishaps and accident rates by at least 50% in the next two years.”

Memorandum from Secretary of Defense
19 May 2003



USN/USMC Active Duty Personnel



Age Group	USN	USMC
18-21	17.66 %	38.7 %
22-27	34.20 %	34.5 %
28-35	25.03 %	16.5 %
36-45	19.94 %	8.9 %
46-55	3.17 %	1.1 %

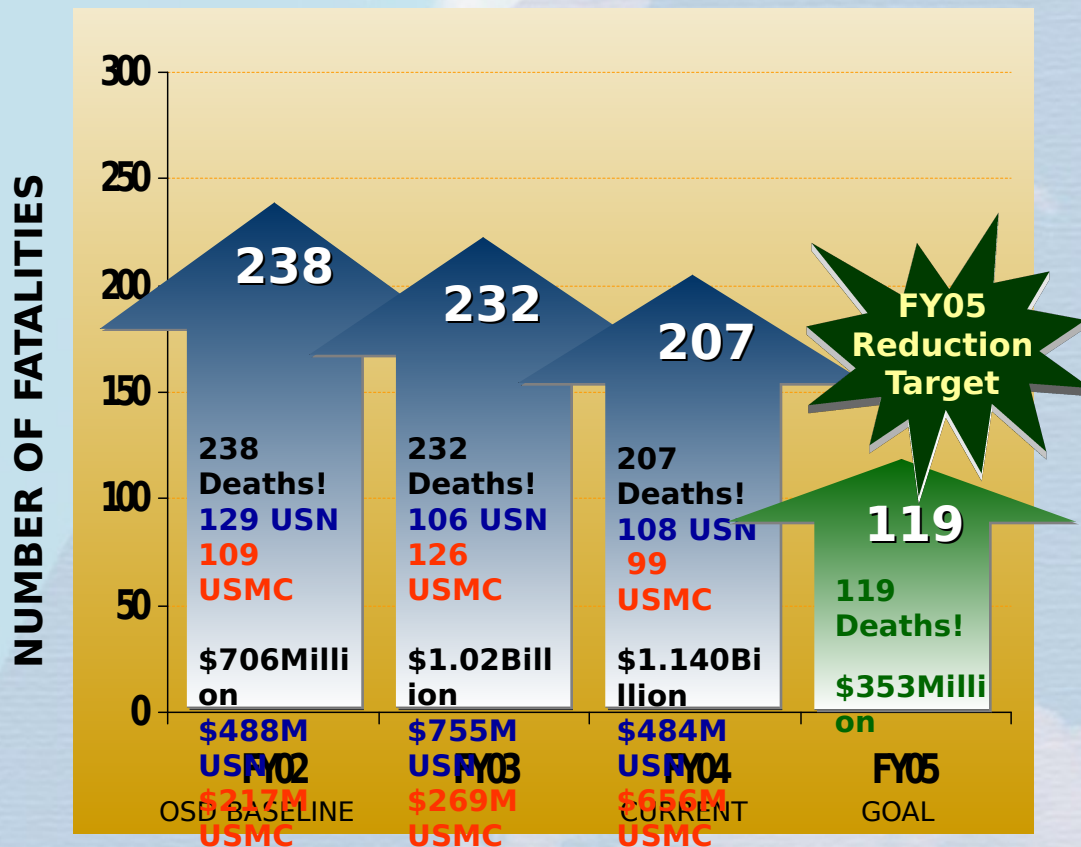
Manpower and Reserve Affairs, 24 September 2004
SPAWARITC (Reports Division), 24 September 2004

Directorate for Information Operations and Reports/30 June 2004



Where We Are

USN/USMC FATALITIES & RESOURCES LOST FY02-04



NSC Data: 20 September 2004

We are headed toward 213 deaths in FY04 -
(**111 USN** & **102 USMC**)

Our FY05 50% mishap reduction goal is 119.

OUR ENDSTATE GOAL IS ZERO!



Where More Attention Is Needed

The Largest Challenge: Aviation - Traffic Recreation!



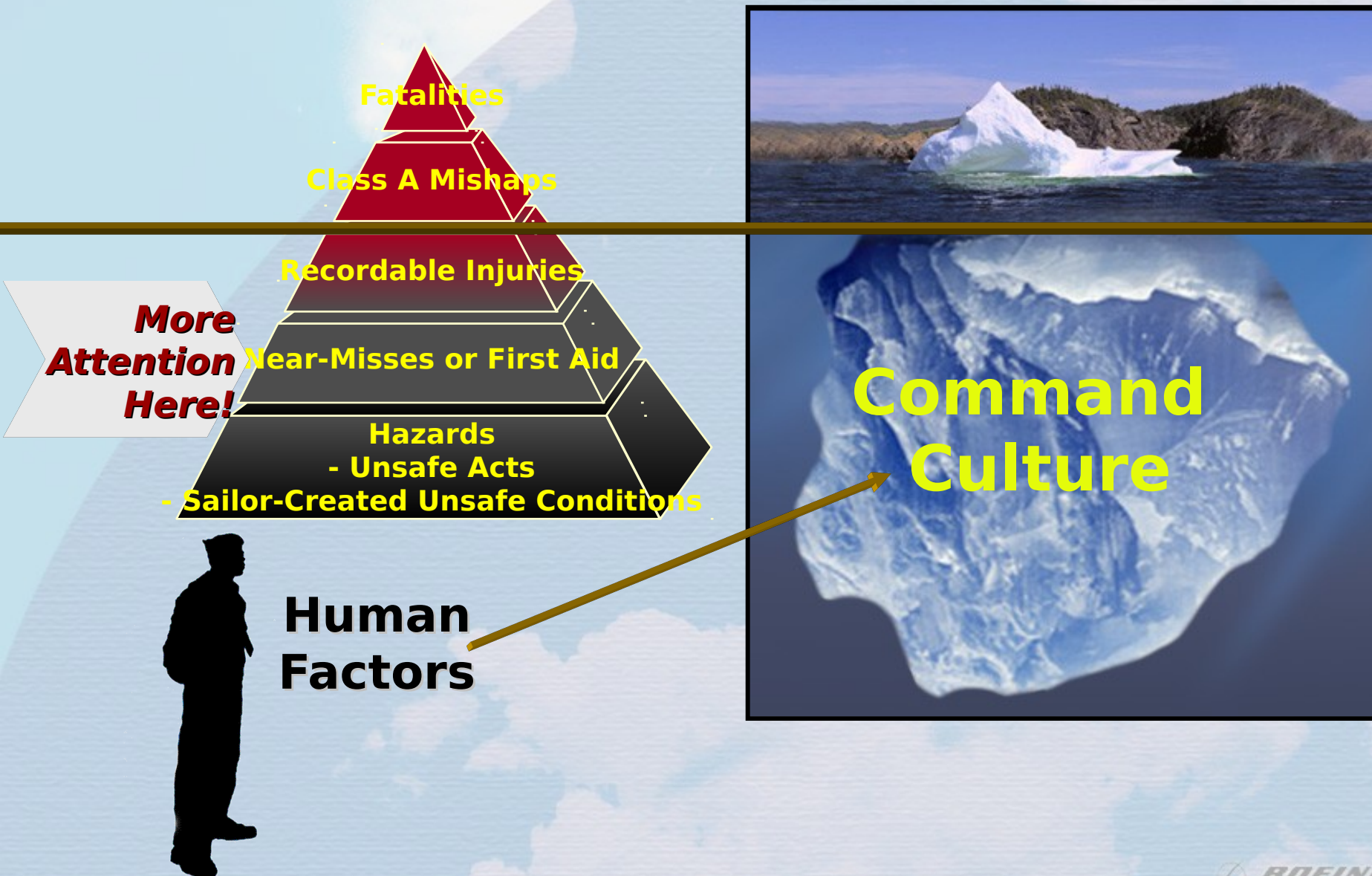
FISCAL YEAR	COST	
	OVERALL	AVIATION
FY99-03	\$ 3.8B	\$ 3.2B
FY02	\$683M	\$587M
FY03	\$1.024 M	\$956M
FY04	\$1.140B	\$1.077B

DEATHS						
OVERALL	PMV			RECREATION		
	Shore	Air	Afloat	Air	Afloat	Shore
1,045	585 361	96	128	141 80	31	30
238	140 78	30	32	32 18	9	5
232	119 71	17	31	32 17	9	6
192	115 79	16	20	32 19	4	9

NSC Data: 20 September 2004



Leaders Focus on Culture





PMV Fatality Rates

Top Causal Factors

WHEN

- Nighttime driving
- Weekends

WHY

- Excessive speed
- No seat belt use
- Alcohol
- Fatigue

USN/USMC Losses*

USN

69 Fatalities

\$10.3 Million

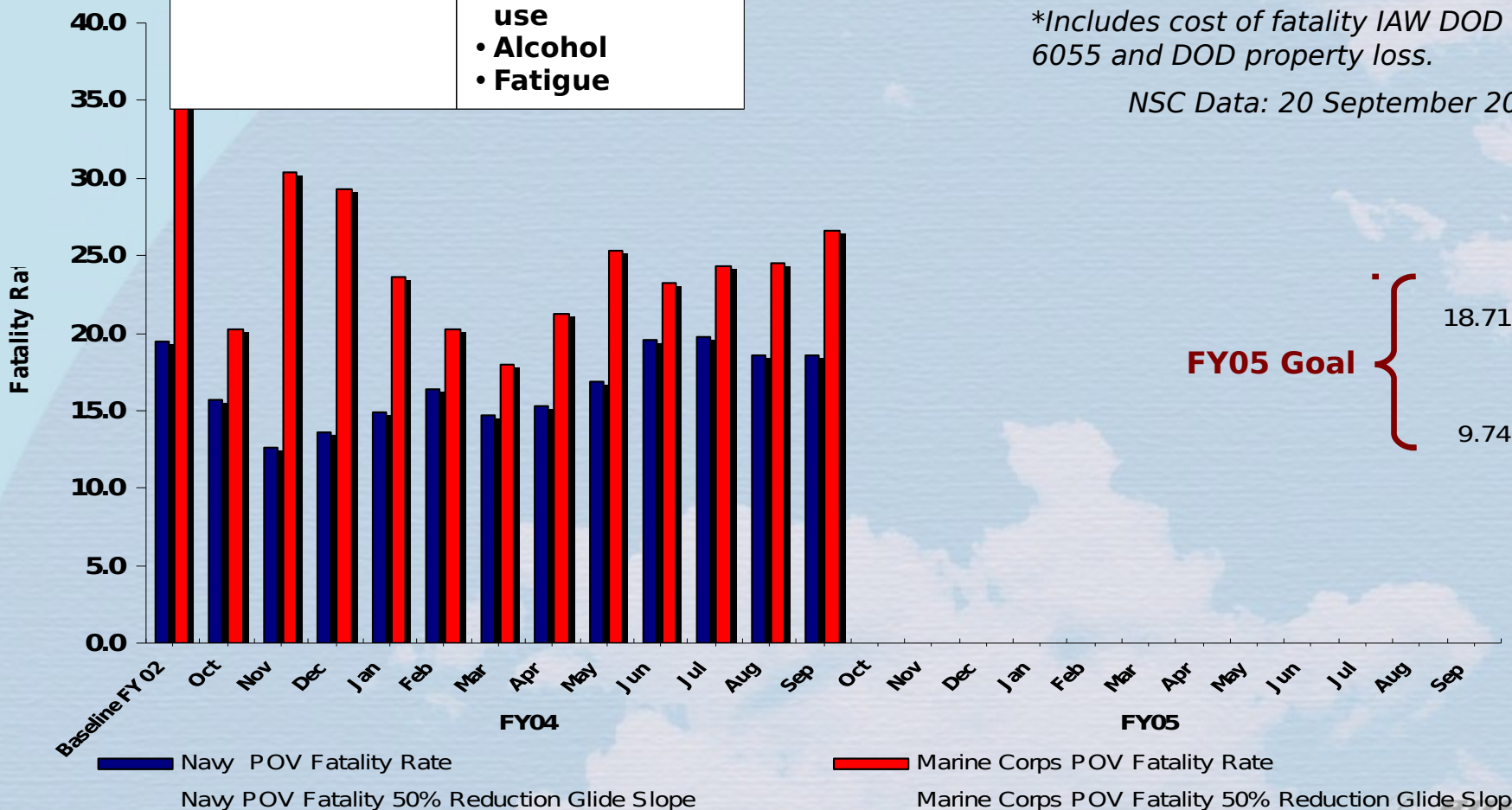
USMC

46 Fatalities

\$6.2 Million

*Includes cost of fatality IAW DOD 6055 and DOD property loss.

NSC Data: 20 September 2004





Recreation/Off-Duty Fatalities & Rates

Leading Causes of Deaths & Injuries

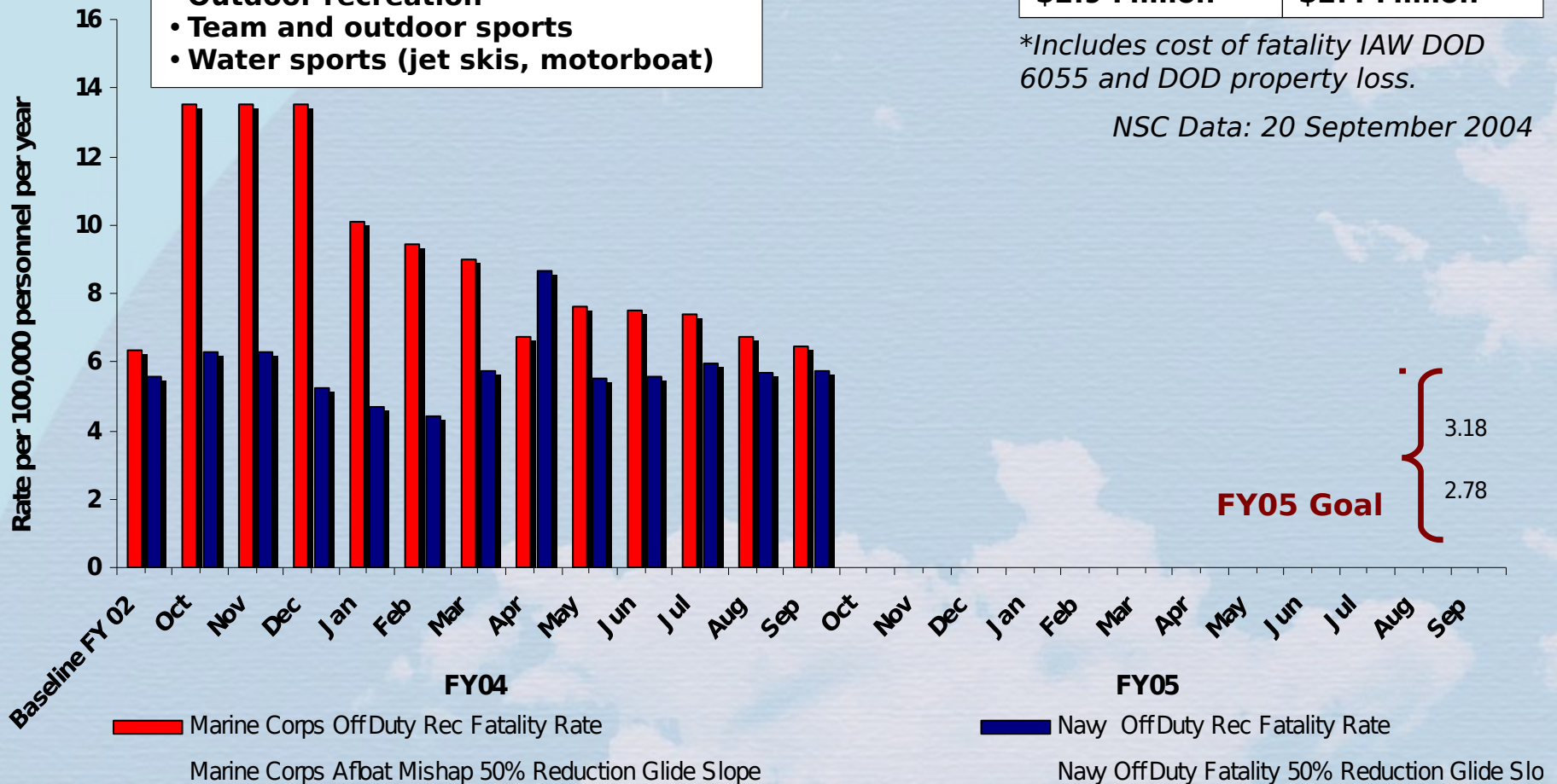
- Drowning
- Falls
- Outdoor recreation
- Team and outdoor sports
- Water sports (jet skis, motorboat)

USN/USMC Losses*

USN	USMC
21 Fatalities	11 Fatalities
\$2.9 Million	\$2.4 Million

*Includes cost of fatality IAW DOD 6055 and DOD property loss.

NSC Data: 20 September 2004



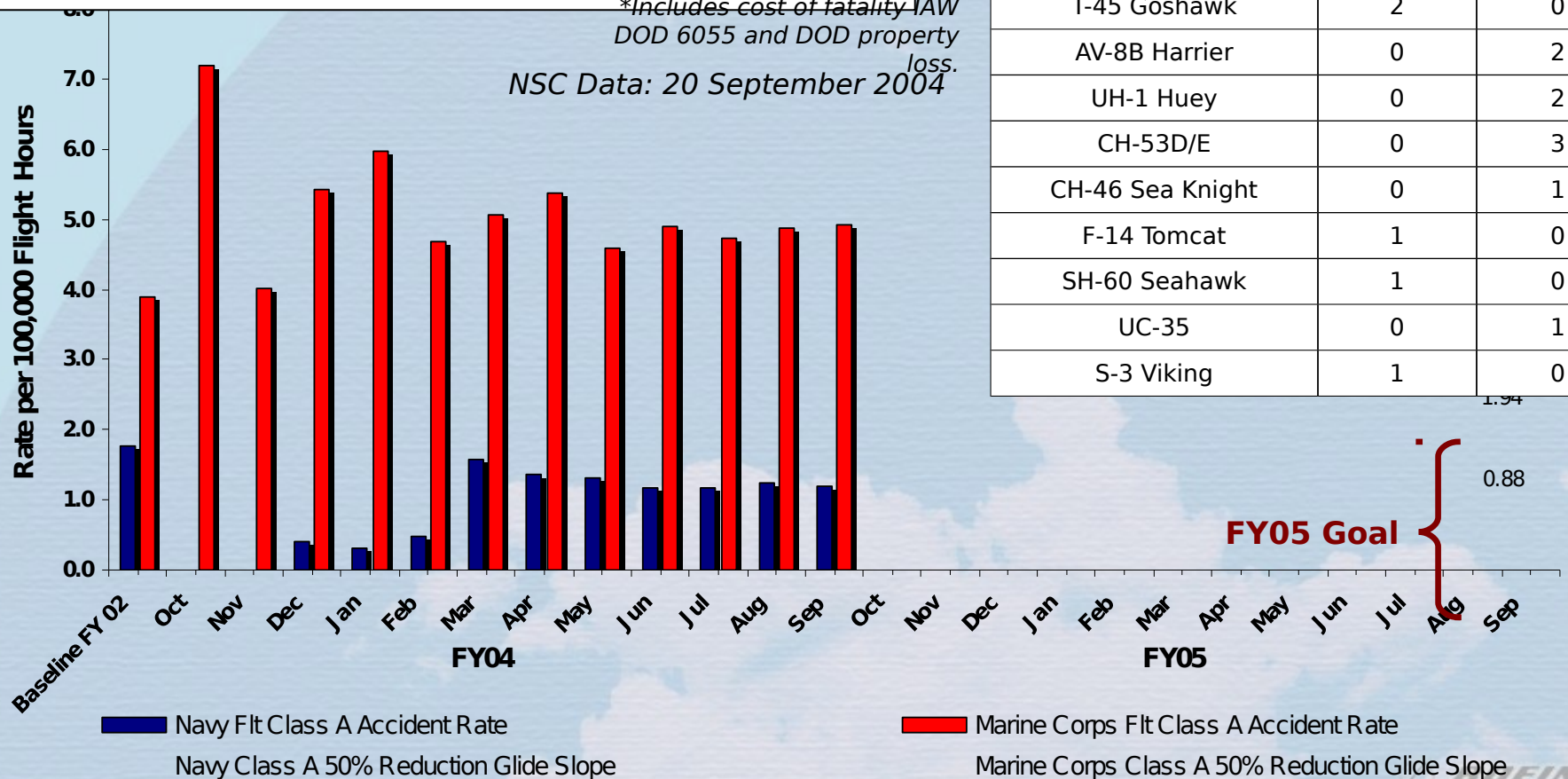


Class-A Flight Mishap Rate

Leading Causal Factors

- **Human Error (89%)**
 - Aircrew (breakdown in Crew Resource Management, poor decision making, failure to properly perform emergency procedures)
 - Supervisory (failure to provide adequate guidance and training)
- **Material/Systems Malfunction (11%)**
 - Material/component catastrophic failure (no human error involved)

**Includes cost of fatality IAW
DOD 6055 and DOD property loss.
NSC Data: 20 September 2004*



USN/USMC Losses*

USN	USMC	
12 Mishaps	18 Mishaps	
4 Fatalities	13 Fatalities	
7 Aircraft destroyed	16 Aircraft destroyed	
\$378 Million	\$632 Million	
Mishaps	USN	USMC
F/A -18 Hornet	7	7
AH-1W Cobra	0	2
T-45 Goshawk	2	0
AV-8B Harrier	0	2
UH-1 Huey	0	2
CH-53D/E	0	3
CH-46 Sea Knight	0	1
F-14 Tomcat	1	0
SH-60 Seahawk	1	0
UC-35	0	1
S-3 Viking	1	0



Afloat Class-A Mishap Rates

Top Causal Factors

- Inadequate supervision
- PMS not accomplished
- Poor crew resource management
- Lack of situational awareness
- Complacency

USN Losses*

7 Mishaps at a cost of \$14 Million

USS John F Kennedy - collision with Dhow

USS John F Kennedy - H2S leak (1 USN fatality)

ACU 5 - M1A1 tank slid off LCAC (1 USMC fatality)

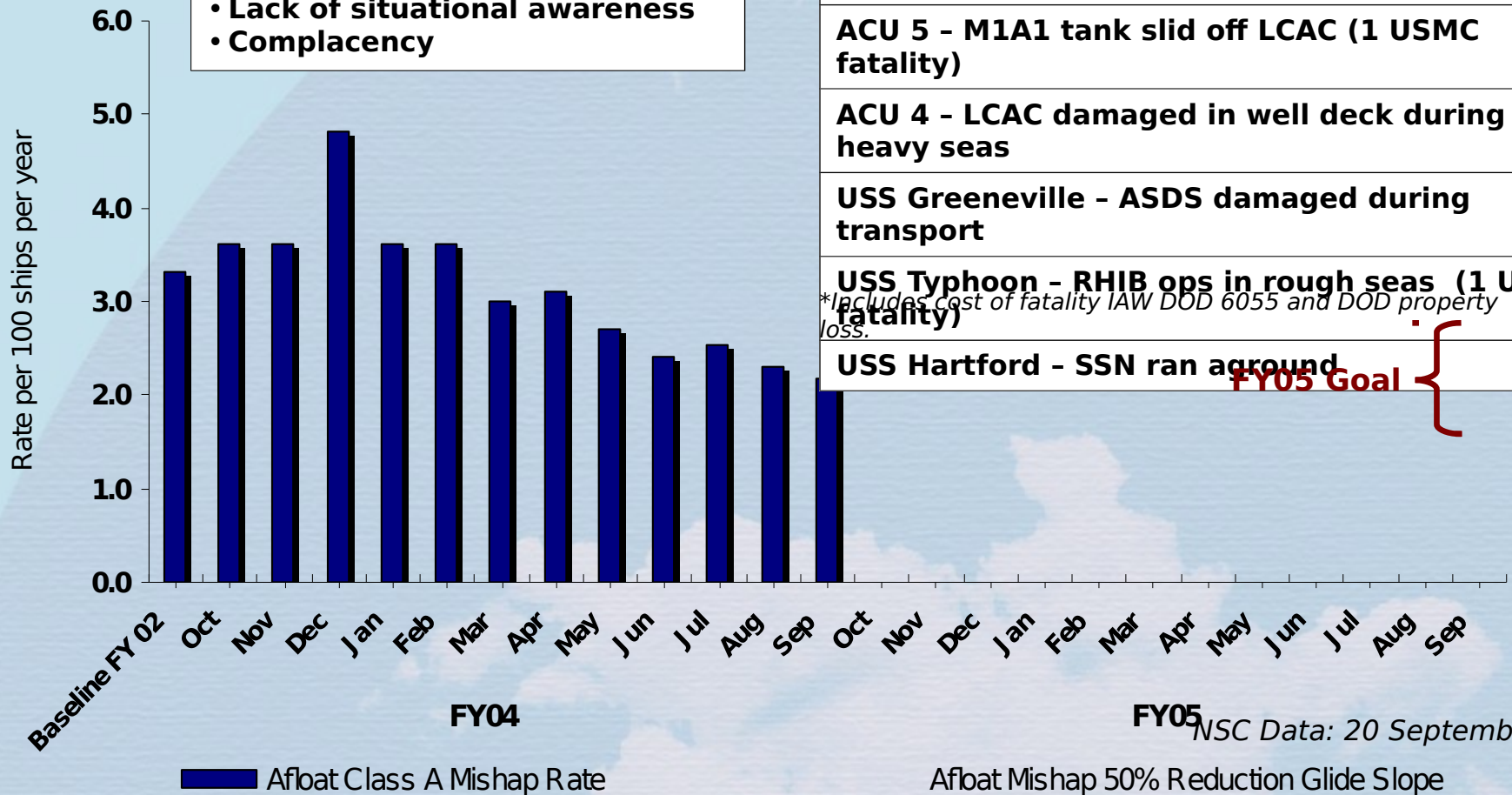
ACU 4 - LCAC damaged in well deck during heavy seas

USS Greeneville - ASDS damaged during transport

USS Typhoon - RHIB ops in rough seas (1 USN fatality)
*Includes cost of fatality IAW DOD 6055 and DOD property loss.

USS Hartford - SSN ran aground

FY05 Goal





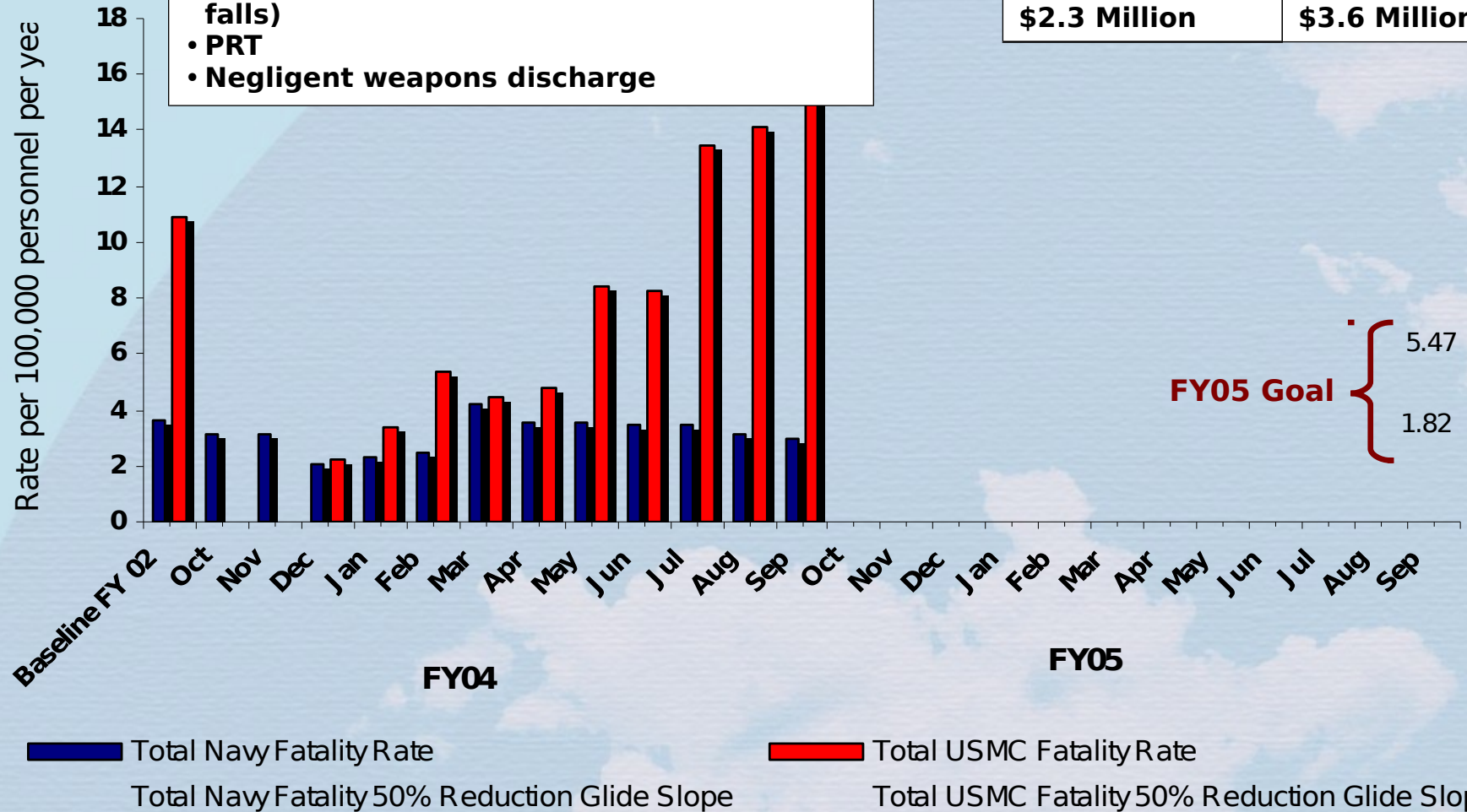
Shore/Ground Fatality Rates

Leading Causes of Deaths

- Tactical vehicles
- GMV mishaps
- Industrial mishaps (electrocutions, burns, falls)
- PRT
- Negligent weapons discharge

USN/USMC Losses

USN	USMC
11 Fatalities	27 Fatalities
\$2.3 Million	\$3.6 Million

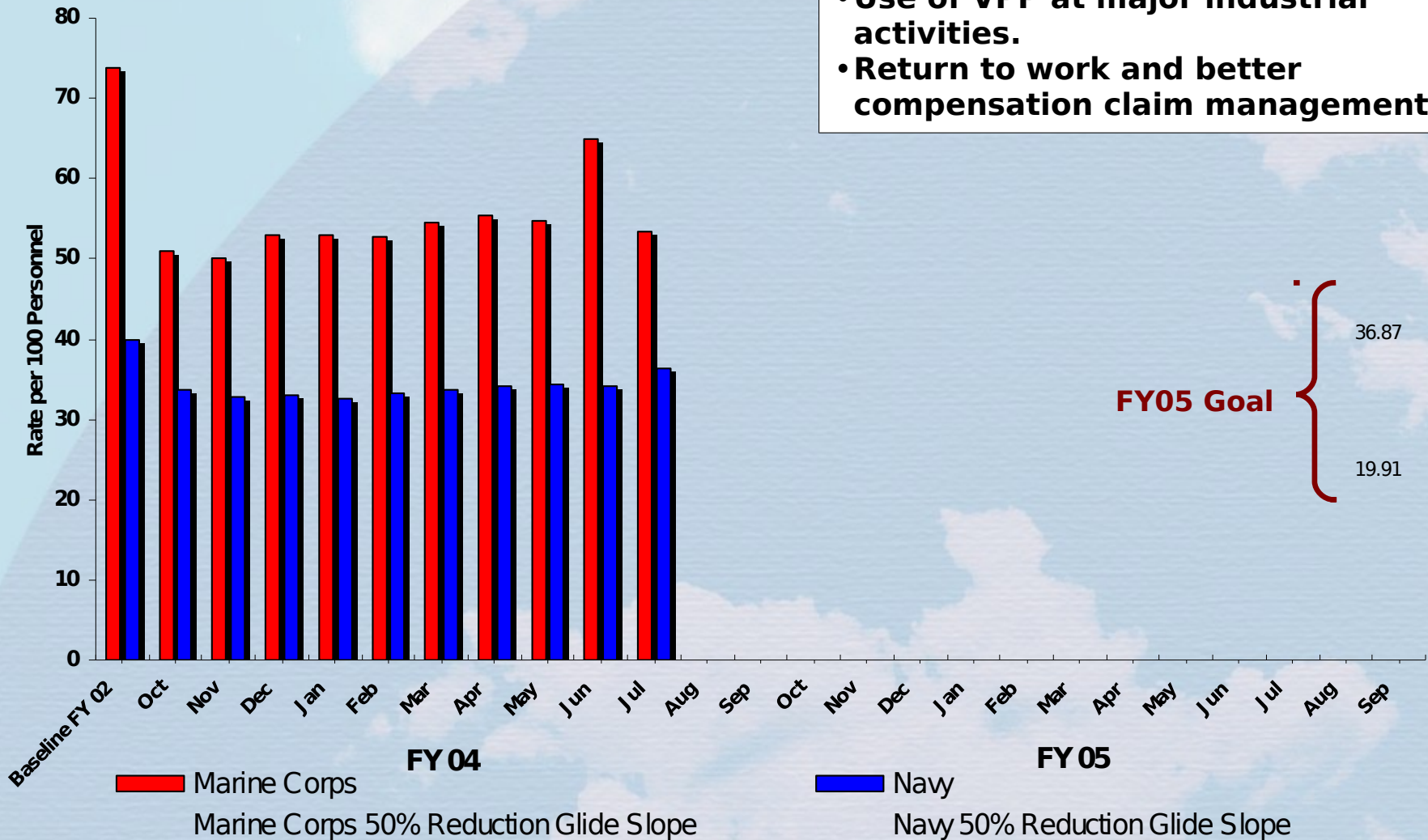




FY04 Total Civilian Lost Day Rates

Initiatives to Reduce Lost Days

- Use of VPP at major industrial activities.
- Return to work and better compensation claim management.





Naval Safety Center Programs

- **Mishap Investigations**



- **Surveys**

- **50% Mishap Reduction Media Kits**

- **Navy Safety Campaign Plan**

- **Critical Days of Summer Campaign: Navy-wide, Website, Print**



- **Safety Outreach Program: Good Samaritan, Safety Stand Downs**

- **Community Partnerships: Chamber of Commerce, USAA**

- **Media Campaign: Video/Print/Broadcast**



- **Social Marketing: “Heaven Can Wait,” “Street Smart,” “None for the Road”**

- **Agency Partnerships: National Highway Traffic Safety Administration/Click It or Ticket, Drive Smart VA,**



- Motorcycle Safety Foundation, VA ABC Department**

- **First Flag Notification**

FRP Initiatives with DASN(S), USMC, USA, USAF





Is It Possible?

- **“Platform” Type Mishaps - YES!**
- **“Off-Duty” Mishaps - HARD.**
 - ***Can be done - but CHANGE a MUST!***



How To Get There

- CO sets the climate  **LEADERSHIP**
 - *Class-A Flight vs. Class-A PMV*
- Khaki and NCO/PO involvement
 - *What are your Sailors/Marines doing after hours?*
 - *Does the COC see the warning signs?*
 - *The “leadership hungry” 3rd Class Petty Officer and LCPL*  **RISK MANAGEMENT**
- ORM
 - *Take it Off-Duty*
- Proactive vs. Reactive
- Accountability
- Human Error
- Is the “Safety Structure” in Place?
- Do Mr. & Mrs. USA care how their son, dad, husband, wife died?



Navy-Wide Challenges

There is still lots to be done!

Reporting &
Analysis

Eliminate or Reduce Top
Causal Factor of Mishaps:
Human Error (85%)

Performance Metrics
for Mishap Reduction

Eliminate or Reduce Highest
Cost, Fatalities, Injuries:
Aviation/PMV/REC

Culture Change:

- Leadership involvement necessary
- Reactive vice proactive
- Report class B/C mishaps
- Make safety a high priority

Emphasize
Accountability
and Responsibility:
Traffic and Recreation
Traffic Enforcement

Funds for Safety Programs:

- USN-USMC Safety Council
≅ \$11.82M FY05-06
(\$2.08M USN & \$9.74M USMC)
- DASN(S) Funding Meeting
- Commander Naval Installations Funding Traffic/Recreation Programs
- Hire 25 Regional Traffic/Recreation Managers and Specialists



GOAL: ZERO MISHAPS



What We Do For The Fleet

Naval Safety Center



Providing aviation, afloat, and shore support
to Navy and Marine Corps commands



NSC at your service... for free!

Let our experience, expertise and unrivaled
commitment to safety work for you.

Mishap Investigations

Surveys

Assist Visits

Data Analysis

Workshops

Publications

Website

Presentations

Exhibits

ON THE ROAD

- Culture workshops
- Unit surveys
- ORM unit training
- Mishap investigations
- USMC MTT seminars
- PCO briefings

AWARENESS

- Fleet Analysis
- Magazines printed/distributed (473,000 copies)
- Interactive CD's
- Acquisition process in-roads
- Safety advisories
- Customer information requests (3,600+ database queries per month)
- Safety Center web page

Call 757-444-3520 (DSN 564) or visit our website: www.safetycenter.navy.mil



Areas Boeing Could Help Us

- Ergonomics and job site modification initiatives used by IAM (International Association of Machinists and Aerospace Workers) union and Boeing.
- Injured worker Return to Work management program success stories.
- Boeing Safety Management System (BSMS) - glean information from the human error risk management program, human error analysis tool to help airlines manage risk.
- Tapping into Boeing's systems safety experience - **sharing lessons learned, program safety features, and new safety technology needs.**
- The single most valuable initiative to drive a successful safety program: Leadership, Culture, Money



Questions & Answers

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www.safetycenter.navy.mil